AMENDMENTS TO THE CLAIMS

1. (Currently amended) An electronically adjustable attenuator, comprising:

an input terminal and an output terminal;

a high frequency signal path having a capacitive divider coupled in parallel with a low frequency signal path having a resistive divider with the resistive-capacitive divider network having one end coupled to said input terminal and a common center tap coupled to said output terminal ~~between said input and output terminals~~ for conveying high and low frequency signals from said input terminal to said output terminal; and

~~a low frequency resistive divider signal path coupled in parallel with said high frequency signal path for conveying low frequency signals between said input terminal and said output terminal;~~

a variable gain amplifier having an input terminal coupled to said common center tap and having output terminal coupled to the other end of the resistive divider for providing gain adjusted low frequency signals, wherein said attenuator is compensated by adjusting gain of said low frequency signals conveyed by said low frequency signal path.

2. (Cancelled)

3. (Cancelled)

4. (Currently amended) The attenuator of claim ~~3~~ 1, further including:

an inverting amplifier for receiving said gain adjusted low frequency signals, and generating an inverted representation of said gain adjusted low frequency signals at an output;

a second resistive path coupled between said output of said inverting amplifier and said input of said attenuator for conveying said inverted representation of said gain adjusted low frequency signals to said input of said attenuator.

5. (Original) The attenuator of claim 4, wherein:

said second resistive path includes a second resistive divider having a center tap; and said attenuator further includes,

a second capacitive divider having a first end coupled to said input terminal of said attenuator, a center tap, and a second end couple to a point of reference potential, said

center taps of said second resistive divider and said second capacitive divider being coupled together; and

a selection circuit having a first input coupled to said centertap of said first resistive divider, a second input coupled to said center tap of said second resistive divider, and an output selectively coupled to one of said first and second resistive dividers.

6. (Original) The attenuator of Claim 5, further including:

offset circuitry disposed within said low frequency compensation path for receiving said low frequency compensation signal and adding an offset signal there to.

7. (Original) The attenuator of Claim 4, further including:

offset circuitry for receiving said low frequency compensation signal and adding an offset signal there to.

8. (Currently amended) The attenuator of claim ~~3~~ 1, wherein:

said variable gain amplifier includes circuitry for generating an inverted representation of said gain adjusted low frequency signals at a second output; and

said attenuator further including a second resistive path coupled between said second output of said variable gain amplifier and said input of said attenuator for conveying said inverted representation of said gain adjusted low frequency signals to said input of said attenuator.

9. (Original) The attenuator of claim 8, wherein:

said second resistive path includes a second resistive divider having a center tap; and said attenuator further includes

a second capacitive divider having a first end coupled to said input terminal of said attenuator, a center tap, and a second end coupled to a point of reference potential, said center taps of said second resistive divider and said second capacitive divider being coupled together; and

a selection circuit having a first input coupled to said center tap of said first resistive divider, a second input coupled to said center tap of said second resistive divider, and an output selectively coupled to one of said first and second resistive dividers.

10. (Original) The attenuator of Claim 9, further including:

offset circuitry for adding an offset signal to said low frequency compensation signal and for adding an inverted representation of said offset signal to said inverted representation of said low frequency compensation signal.

11. (Currently amended) ~~The~~ An electronically adjustable attenuator ~~of claim 1, wherein~~ comprising:

an input terminal and an output terminal;

~~said~~ a high frequency signal path ~~comprises~~ having a capacitive divider~~;~~ coupled in parallel with a ~~said~~ low frequency signal path ~~comprises~~ having a resistive divider;~~ and~~

said resistive and capacitive dividers have a common input terminal coupled to said input terminal, a common center tap ~~point~~ coupled to said output terminal for conveying high and low frequency signals from said input terminal to said output terminal, and a common terminal coupled to a point of reference potential;

~~said attenuator further including:~~

a lowpass filter for selecting low frequency signals; and

a variable gain amplifier having an input terminal coupled to said common center tap ~~point~~ and an output terminal coupled through said lowpass filter to said output terminal of said ~~attentuator~~ attenuator for providing said gain adjustment for said low frequency signals.

12. (Currently amended) ~~The~~ An electronically adjustable attenuator ~~of claim 1 further including~~ comprising:

an input terminal and an output terminal;

a high frequency signal path coupled between said input and output terminals for conveying high frequency signals from said input terminal to said output terminal;

a low frequency signal path coupled in parallel with said high frequency signal path for conveying low frequency signals between said input terminal and said output terminal;

a first amplifier; wherein

said high frequency path comprises a capacitor disposed between said input ~~of said attenuator~~ terminal and an input of said first amplifier, and a feedback capacitor disposed between an output of said first amplifier and said input of said first amplifier;

said low frequency path comprises a resistor disposed between said input ~~of said attenuator~~ terminal and said input of said first amplifier, and a feedback resistor disposed between said output of said first amplifier and said input of said first amplifier; and

a variable gain amplifier for adjusting low frequency gain, said variable gain amplifier being coupled within said low frequency path between said output of said first amplifier and said feedback resistor.